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Philadelphia College of Osteopathic Medicine
Graduate Program in Biomedical Sciences
School of Health Sciences

**A systematic review of the of factors contributing to sustained homelessness and those
influencing the deterioration of homeless health and healthcare.**

A Capstone in Public Health by Mojisola Delano
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ABSTRACT

Homelessness is a perpetual problem occurring in society. With a lack of competency of either government institutions or private establishments to provide the required intervention to provide shelter and aid for the existing homeless population or to prevent further homelessness; the next best objective would be to keep this population healthy, by employing hygiene interventions. However, there is a serve lack in hygiene interventions as well. A few US cities and many counties abroad have begun to research and implement strategies for sanitary intervention in homeless hygiene in hopes that if they are unable to “cure” homelessness, then they can at least keep the homeless healthy.

Maintaining hygienic environments within the homeless population is a significant dilemma that extends beyond just ensuring that the physical hygiene of the individual is adequate, but to comprehending the effect that the environment in which they live, has on their mental and emotional status. Cities such as San Diego have established hand washing stations to lower the risk of spreading Hepatitis A (Hep A) from the use of dirty water or unsterile needles and injection sites. Sidewalk and street cleaning with chlorine infused power washer were also implemented, to assist in hindering the Hep A outbreak. In addition to these multiple hand washing stations, portable toilets and hygiene kits were also supplied in the particularly in the downtown areas which have a higher homeless population. As a result, San Diego achieved great success using their sanitation interventions to effectively combat the immediate health crisis of the Hep A surge. However, there is continued need to address the problem of homelessness in the city. San Francisco is another city that is utilizing mobile showers to give back a sense of dignity to its homeless population and as a first step to mitigate the cycle of homelessness.

This paper is a review of the effectiveness of these interventions to determine whether they can be expanded past the initial and immediate use of quelling outbreaks and providing basic hygiene in homeless population, into a more consistent and sustainable bridge to improving the more intrapersonal components of homeless individuals.

The primary goal of this analysis is to provide an education on the current condition of this crisis and to encourage a discussion on how to better develop interventions for the homeless populations in large urban cities much like Philadelphia. With this information, a theoretical strategy can be outlined for cities with large urban population, where homeless intervention seems to be lacking.

Background

The United Nations (U.N.) defines homelessness as “persons living in streets or without any type of shelter that would fall within the scope of living quarters; or persons with no place of usual residence who move frequently between various types of accommodation” (United Nations Department of Economic and social Affairs Statistics Division, 2017). The Homeless HUB of the Canadian Observatory on Homelessness defined it as “the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it. It is the result of systemic or societal barriers, a lack of affordable and appropriate housing, the individual/household’s financial, mental, cognitive, behavioral or physical challenges, and/or racism and discrimination” (2019). Both definitions emphasize the lack of safe, sustainable and reliable housing as homelessness. Shelters are regularly thought of as a solution to homelessness, however homeless shelters are highly used by the homeless population and can therefore be at full capacity for longer periods of time causing other people needing shelter to be turned away and services shut down for periods of time. Homeless shelters are not considered stable or permanent housing but are to be used as temporary and crisis housing. Homeless shelters are of great importance in meeting the basic needs of people experiencing homelessness, but only on a short-term basis (Moffa et al., 2019). Major attention to and investment in improving the environmental health conditions and hygienic behavior in homeless shelters, must occur before shelters can be considered a sustainable avenue to protect and promote the health and well-being of people experiencing homelessness. Until this is done, homeless shelters fall out of the race of being possible solutions for the homeless epidemic. If an answer is to be found, it must come from factual narratives and data based on people experiencing homelessness who sleep on the street or in open spaces.

Moffa et al. (2019), found that environmental health conditions and hygiene were defined to encompass water, sanitation, air quality, waste management, overcrowding, personal hygiene, handwashing, and food hygiene. These are all uncontrollable environment factors that are essential for healthy living. A person experiencing homelessness in the United States often lacks many of these factors and faces significant barriers to self-care and personal hygiene, including limited access to clean showers, laundry and hand washing facilities (Leibler et al., 2017).

Moffa et al. (2019), focused on the environmental conditions of homeless living; quoting that “insufficient access to free and available sanitation facilities among people experiencing homelessness worldwide, leads to open defecation and urination, particularly in the environment surrounding homeless shelters” (Capone et al., 2018). They conducted a national survey of the available research and surmised that people experiencing homelessness who sleep on the street or in open spaces, practice and report poorer personal hygiene and have less access to water sanitation and hygiene facilities (Moffa et al., 2019). These authors also conducted their research in high-income countries, in North America and Europe, revealing an imbalance in the reported outcomes.

Medical healthcare is another area that homeless populations have historically and unequivocally suffered. Primary care issues such as: obesity, hypertension, diabetes mellitus, sexually transmitted infections, urinary tract infections, upper and lower respiratory infections, COPD, depression, and poor dental care, can escalate into life-threatening, expensive emergencies (Fleisch & Nash, 2017). The authors of this article were specifically looking at factors that exacerbate diseases and complicate homeless care. Nearly 700 individuals experiencing homelessness are at risk of dying from hypothermia yearly in the United States. Since homeless persons frequently stay outdoors or within shelters, exposure to insect bites or

parasitic infestations is three times higher than in the residential population (Fleisch & Nash, 2017). The National Coalition for the Homeless documented 1437 acts of violence committed against homeless persons, from 1999 to 2013. Additionally, in a racially diverse sample of homeless mothers, 92% reported experiencing severe physical and/or sexual violence at some point in their lives (Fleisch & Nash, 2017). This data shows that people who are homeless have vastly greater rates of exposure to disease, infection and physical abuse, with a rather apparent lack of medical care available and therefore being received. The data also suggests that more targeted or specialized care is necessary for this subpopulation.

Authors Otilie Stolte and Darrin Hodgetts discuss alternative perspectives of how homeless persons navigate health in unhealthy environments. They applied their unique perspective to determine the differences between a landscape of despair and a landscape of care. Ultimately, Stolte and Hodgetts focused their research on how a person living in homelessness has to navigate and finally change their landscape from one of despair, to one of care. Stating that the concept of therapeutic landscapes (or spaces for care) is used in the health sciences with reference to places that have healing effects, including hospitals, spas and gardens (Stolte & Hodgetts, 2015). The concept of landscape of despair refers to the drift of vulnerable people from hospitals and asylums to ghettos and onto the streets following deinstitutionalization (Stolte & Hodgetts, 2015). Homeless persons often develop innovative ways to change their landscapes to better meet their health needs. They develop mastery over everyday health-enhancing practices allowing them to transform a landscape of despair into a landscape of care. The authors believe that if they are to focus on this demographic and the interrelationship between their environment and their health it requires the integration of research into therapeutic and non-

therapeutic spaces to reveal aspects of the realities of place and health within a homeless lifeworld (Stolte & Hodgetts, 2015).

The overwhelming conclusion presented from these sources and many others, is that without regular spaces or dwellings to provide shelter, warmth, water, food, storage, safety and security homeless people struggle to access many of the fundamental resources needed to sustain health.

Objectives

The purpose of this systematic review of literature on health conditions and hygienic behaviors in homeless populations, is to explore whether there is evidence documenting these conditions, health behaviors, the possibility of services being provided to those living in these conditions and findings on the efficacy of such interventions that have been applied to similar settings.

RESEARCH STRATEGIES

This review was specifically concerned with all factors (environmental, socioeconomic, and psychological) that are keeping people in homelessness. The focus was on what interventions are in place to better the health of those living in homelessness. Studies were included in the search parameters if they had recent dates of publication and reported primary data on one or more environmental health conditions or hygiene behaviors in homeless communities.

The search queries utilized are terms centered around homeless hygiene and homeless hygienic intervention. In making the parameters for this analysis there was not much literature on homeless hygienic intervention in the United States and even less when narrowed down to Philadelphia and its environs. To focus the search, those limitations were therefore dropped in favor of a more general approach, centered on factors that affect homeless populations and how research defines homelessness, in both local and foreign settings. The aforementioned search enquiries brought up articles outlining the environment homeless people live in, barriers to health and hygiene practices and how the public has either helped or hindered the process of escaping homelessness. With this definition, this search was further narrowed to exclude research on evaluating the efficacy of homeless shelters, in favor of focusing on the root of the problem; street-based homelessness and related studies. Studies that detailed interventions which had been successfully implemented, both foreign and domestic were included. This review is specifically looking for the public's reception of the intervention received, where it was effective and appropriate for that community and if the surrounding communities accepted it.

DISCUSSION

It is becoming increasingly evident that there is a major disparity in the care of the homeless population. Defined by their lack of access to private domestic spaces in which an increasing amount of health care occurs (Stolte & Hodgetts, 2015). This crisis is not one that can be solved with a few simple measures. To begin to help these communities we must start with their most fundamental needs; health and hygiene. Homelessness leads to poor health and poor health leads to homelessness. This cycle is perpetuated by the lack of access to basic health practices. Common conditions, such as high blood pressure, diabetes, asthma and even minor medical trauma, such as a small laceration, can become life-threatening because of inability to obtain medications, unhealthy diet, or lack of access to a clean environment (Fleisch & Nash, 2017). Without regular dwellings to provide shelter, warmth, running water, refrigeration and storage, homeless people struggle to access many of the fundamental resources needed to sustain health (Stolte & Hodgetts, 2015). Without these resources, people living in homelessness are inhibited from moving forward or gaining the ability to get out of this cycle. This means that people experiencing homelessness may find themselves unable to transition into housing and health, despite working one or more minimum wage jobs (Fleisch & Nash, 2017). People experiencing homelessness must adapt to a constantly changing and unpredictable environment by creating certain coping tactics. Tactics can be described as; things people do in the face of not being in full control of their environments. In other words, these particular tactics involve ‘making do’ despite the constraints evident in an unhealthy landscape (Stolte & Hodgetts, 2015). Tactics used for spatial appropriation specifically, remain fragile because structural restraints undermine the ability to assert more control over the places in which the homeless resides and their health. Homeless persons must work to engage in many of the basic daily health-enhancing

practices that domiciled people take for granted. The development of these skills is crucial for their survival, comprehensive strategy that involve stitching together a landscape for health maintenance across public spaces, by journeying through the city to a range of sites, each of which provides one component of overall health maintenance strategy (Stolte & Hodgetts, 2015).

People experiencing homelessness, may face reduced access to sanitation facilities and difficulties engaging in health-promoting self-care activities this access has received little attention in the U.S. There is a massive need to identify hygiene-related self-care practices and risk factors for reduced hygiene in this population however, few studies have explored hygiene-related self-care practice among persons experiencing homelessness in high-income regions such as Boston, MA (Leibler et al., 2017). Personal hygiene and self-care, particularly access to regular showering and clean clothing, may also increase the likelihood of transitioning out of homelessness, through obtaining a job or a housing placement. Hygienic behaviors amongst people experiencing homelessness likely reflect the availability of sanitation facilities, perception as to the safety or usability of these facilities, as well as personal practices (Leibler et al., 2017).

An example of simple health problems that are exasperated because of lack of hygiene within the homelessness environment, is foot care and conditioning. Foot problems are common among homeless persons and those homeless individuals often have inadequate foot hygiene practices including improperly fitting shoes. Walking is a common mode of transportation and increases the risk of developing physical injury, poor hygiene, and inadequate footwear all of which are contributing factors to foot problems (To, Brothers & Zoost, 2016). Homeless individuals also have an increased risk of repetitive minor trauma. Lack of access to health services and financial resources prevent homeless individuals from receiving appropriate treatment for foot-related concerns. Poor foot hygiene, sleeping on the streets, and living in

crowded environments such as homeless shelters increases exposure to pathogens and increase risk of acquiring infections (To, Brothers & Zoost, 2016).

A common assumption, among those who have permanent residences, is that lower socioeconomic status groups do too little to help themselves, and that their lifestyle choices are what keeps them in poor health. These assumptions are highly questionable and may seem rather ignorant. However, mainstream health services tend to reflect the assumptions and values of conventional society and, therefore, do not take the particular life situations of homeless people into account. Being homeless usually exposes people to adverse living conditions, and to the unresolvable dichotomy of striving to achieve personal responsibility for health, while existing in unhealthy places. Homeless people often tolerate severe physical health problems for much longer than the general population (Stolte & Hodgetts, 2015).

RECOMMENDATIONS FOR FUTURE STUDIES

Hygiene intervention can be the first step in mitigating the endless cycle of homelessness. At the very least, it can begin to help a sick and dying population become healthy. These interventions can be complex, multifactorial inventions or as simple as creating outdoor lavatory facilities. Cities, states and countries across the globe are creating innovative ways to protect those affected by homelessness. Provision of medical care for homeless persons may require coordination with medical outreach teams, shelters, and free clinics. Serving these patients requires time, patience, and a willingness to engage around nontraditional issues in clinical care, including asking about living conditions, medication access and affordability, and transportation. The means to possible solutions, include a willingness to work with patients on goals that they prioritize as important (Fleisch & Nash, 2017).

For example, homeless individuals may not have material and financial resources that are necessary to maintain good foot hygiene such as clean water, soap, towels, nail clippers and files. Service providers may need to ensure that individuals have access to these essential foot care items. Ensuring that individuals have clean socks and properly fitting shoes could help reduce the incidence of foot problems and improve mobility. Development of effective intervention to address the unresolved foot health needs of this population should be prioritized. Mobile interventions may be particularly effective in this population given the high burden of unmet medical and social needs (To, Brothers & Zoost, 2016).

Mobile dental vehicles (MDVs) can be adopted to address the oral healthcare needs of the homeless population, these vehicles can be made from retired trucks and/or buses. MDV programs can also be a bidirectional win-win strategy that benefits both the people receiving the service and the dental staff delivering the services. With high mobility, self-sufficiency, and cost-

effectiveness, the use of MDVs can be a promising strategy to deliver oral healthcare to homeless communities (Gao, et al., 2019). R. Stanwell-Smith from the UK (2010) states, public toilets should not be considered as a profit-making exercise but a civilized necessity, increasing hand washing and efficient hand drying as well as reducing the spread of infection.

If a major city such as Philadelphia were to take these recommendations and components of other regions plans. These cities could make a comprehensive and sustainable intervention to be the beginning of the end of the vicious cycle of homelessness.

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